rial agents. These preliminary but encouraging results indicate that 2-thiazolylimino-5-arylidene-4-thiazolidinones are promising scaffolds for design and development of new molecules for antimycobacterial activity. Further structural optimization and identification of molecules are underway in our laboratory.

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Antibiotic susceptibility profile of enteric organisms from healthy individuals in a tertiary institution in Nigeria

F. Agbaje-Daniels[1,*], A. Babalola[2], I. Akintayo[3], A. Adeleye[4]

[1] *Crawford Univeristy, Igbesa, Ogun State, Nigeria*
[2] *Crawford University, Ogun, Nigeria*
[3] *Crawford University, Ogun State, Nigeria*
[4] *University of Lagos, Lagos, Nigeria*

Background: The world health organization has declared antibiotic resistance as a pandemic which calls for urgent attention. Antibiotic resistance of *Shigella* spp. and *Escherichia coli* isolates from diarrheal patients in Nigeria has been reported to be on the increase (Iwalokun *et al*., 2001; Yah *et al*., 2007; Kimang'a, 2012). *M. morganii* had been previously implicated in nosocomial infections, sepsis and other infections (Singla *et al*., 2010) . *M. morganii* has been reported to possess resistance plasmid which is of great importance when implicated in infections. Antibiotic resistance rate among enteric bacteria is becoming alarming and this therefore calls for a constant monitoring of antibiotic resistant organisms in the environment especially among healthy individuals.

Methods & Materials: Forty-two stool samples were obtained from healthy individuals in a tertiary institution. Stool samples were obtained in March 2015. These were processed using standard microbiological and bacterial isolates were characterized with Microbat 24E. Antimicrobial susceptibility profile of the isolates was obtained using the disc diffusion method according to Bauer *et al*., 1966 and NCLS, 2000.

Results: Eight-nine bacterial isolates comprising of *Escherichia coli*, *Escherichia fergusonii*, *Enterobacter agglomerans*, *Enterobacter sakazakii*, *Citrobacter youngae, Citrobacter freundi*, Enteric group GP59, *Morganella morganii, Salmonella enterica* subspecies *arizonae* (IIIb), *Salmonella enterica* subspecies *diarizonae* (IV) , *Salmonella pullorum*, *Proteus vulgaris, Proteus mirabilis*, *Yersinia aldovae*, *Yersinia intermedia*, *Serratia marcescens*, *Serratia liquefaciens*, *Acinetobacter iwoffii*, *Klebsiella ozaena*, *Klebsiella oxytoca* , *Providencia stuartii* and *Hafnia alvei* were isolated and characterized. *Escherichia coli* was the most prevalent (25.8%), followed by *E. agglomerans* (21.3%) with the least prevalent being, *Acinetobacter iwoffii and Providencia stuartii* (1.1%). High antibiotic resistance of the isolates to cefuroxime (92.1%), ceftriaxone (92.1%) and ceftazidime (91.0%) was observed, the least resistance was observed towards gentamycin (20.2%). About 80% of the isolates showed multi-drug resistance to commonly prescribed antibiotics.

Conclusion: The high antibiotic resistance observed in these bacterial isolates from healthy individuals revealed the need for constant monitoring of antibiotic resistance bacteria and the urgency for sensitization for personal hygiene practices as these may serve as sources of infection within the community.

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Socio-economic and demographic impact on malaria prevalence in Akoko South-west of Ondo state, Nigeria

F.R. Akanbi

University of Ibadan, Ibadan, Nigeria

Background: Malaria is an endemic disease prevalent in the tropical and sub tropical region of the world. About 216 million people are still affected by malaria yearly killing about 650,000 people with children under five and pregnant women mostly affected. Many people had died unnecessarily due to malaria due to their inability to procure hospital prescribed drugs especially where free malaria drugs are not available

Methods & Materials: Three basic instruments used for this research were observation, interview and questionnaire. Both primary and secondary data were used for this study. Here data on pregnant women who attend antenatal clinics were collected via well structured questionnaires for the primary data and data on hospital records of malaria episode of pregnant women in the past year was also collected from the hospital archives and their addresses well noted. Two hundred and four pregnant women were involved in the study. The pregnant women were grouped into two based on their age (i.e. 15-35 & 36-45). Socioeconomic and demographic factors such as age, educational, occupational, income and malaria prevalence were considered. Statistical techniques used for the study were ANOVA and Chi-square analysis.

Results: Of the 204 pregnant women who administered the questionnaire, 136 had malaria infection. The prevalence of infection among younger age range (15-35 years) was significantly higher (25.89%), than those with middle age group (10.3%). The prevalence of infection was higher among those with secondary education (54.4%) when compared with those with tertiary education (14%). The prevalence of malaria infection was higher among those who engaged in craft work and those without job (22.8% and 22.1% respectively) compared to the civil servants (8%). Based on income per capital the study also revealed that the prevalence of infection was highest among those with lowest income per capital (43.4%) and 5.1% in highest income earners. Secondary data attributed 57.8% of total malaria episode to pregnant women and its mostly due to poverty.

Conclusion: This study shows that socioeconomic and demographic factors play a significant role in the prevalence of malaria infection in Nigeria according to the study.

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